

04/24/2013

Upon request from the Texas Commission on Environmental Quality (TCEQ), EPA personnel were mobilized to conduct air monitoring activities. On April 19, 2013 within hours of the fire and explosion, the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft was used to collect airborne infrared (IR) images and data for the West Fertilizer fire near West, Texas. The ASPECT detected ammonia at volumetric concentration of 6 to 10 part per million (ppm) by volume at approximately 650 feet downwind or southeast of the facility at approximately 800 to 1000 feet above ground level. The ammonia concentration is less than the Acute Exposure Guideline Level - 1 (AEGL-1) for exposure up to 8 hours of 30 ppm. The AEGL-1 is the airborne concentration, expressed as ppm of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort or irritation. However, the effects are not disabling and are transient and reversible upon cessation of exposure. Inhaling of ammonia can cause rapid onset of a burning sensation in the eyes, nose and throat according to the Agency for Toxic Substances and Disease Registry (ATSDR) Medical Management Guidelines (MMGs). In addition, the MMG noted that upper airway swelling may lead to airway obstruction.

Due to the potential release of pesticides stored on the facility by the fire and explosion, the EPA collected soil samples in the immediate vicinity of the site from public access areas owned by the City of West and the West Independent School District on April 21, 2013. A total of 12 composite soil samples were collected to be analyzed for pesticides and the results from the analysis will be compared to the TCEQ Protective Concentration Levels (PCLs) for residential soils.